

PHILMONT Mobile RADIO CLUB INC.



Philmonts  
MIDMONTH  
at  
Bob Minster K3UWO

The BLURB  
MOVES TO  
'GREENER' pastures  
QTH / QZO



The BLURB is published monthly by and for the members of the Phil-Mont Mobile Radio Club. Our purpose is to further the interest of amateur radio in general and mobile radio in particular. We endeavor to keep the news accurate, interesting, and educational. Copying and quoting is permitted, with a credit line, and we gladly exchange subscriptions with other clubs.

DEADLINE: All material must be in the hands of the Department Editor before the 15th, as the BLURB is mailed on the last Monday of each month.

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W3TKQ - CLUB STATION

The Franklin Institute  
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Philadelphia, Pennsylvania 19103

CLUB NETS & FREQUENCIES

29.493mc - 10-on-10 Net Sundays  
1000, monitored daily. 29.626mc  
2nd Freq., 3993kc SSB Q730-0845,  
50.70 and 52.525mc (FM) 147.78mc

Sam's HALFACRESATELLITE COMMUNICATION FREQ.SATELLITE TO EARTH

3400 TO 4200 MC.  
4400 TO 4700  
7250 TO 7300  
7300 TO 7750

EARTH TO SATELLITE

5725 TO 5850 \*  
5850 TO 5925 \*\*  
5925 TO 6425  
7900 TO 7925  
7925 TO 8025  
8025 TO 8400

\* - USED IN EUROPE & AFRICA

\*\* - USED IN ASIA & AUSTRALIA.

By this time all of our members should have their 1966 Club Directories. It was no small job to get the Directory together and get it printed. My sincere thanks to the Directory Committee, W3DYP, W3RTR, W3TJQ, W3YP and W3CDY for their splendid efforts in our behalf. Well done!

There are still several things that I planned for 1966 that are not yet done. One is to get relief for GIF Al, as refreshment chairman. Al has served for many years and we need a successor for him. A helper is already available, so please, some kind soul with Phil-Mont spirit, come forward and volunteer.

Another important item is to get at least two volunteers to get our remote code practice set-up on the road. By the time you read this, I will have gotten from H1J Joe, our ex-prez, the material that has been developed for this job. Some of you circuit men could have a ball with this project!

Since my XYL Emma and I will be going on a trip to Hawaii in September, I am asking our esteemed vice-prez to take over the September mid-month and the regular October meetings. C U when we return. 73's

Fred, W3ADV

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LETTER TO THE EDITOR

To my Philmont Friends:

I would like to thank all of you for your patience and perseverance in trying to understand the noises I make. It has been four years this August and you have done much in helping me make understandable noises. I'm still trying to improve of course but without your kind words and warm encouragement over the rough spots, I would not have made it this far. So many thanks fellows. Whether it seems so or not, I very much appreciate your listening.

AL, W30WK

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PHILMONT CALENDAR FOR SEPTEMBER

Monday, September 12

Regular Meeting at the Franklin Institute

Wednesday, September 21

Midmonth at K3UWO

Monday, September 26

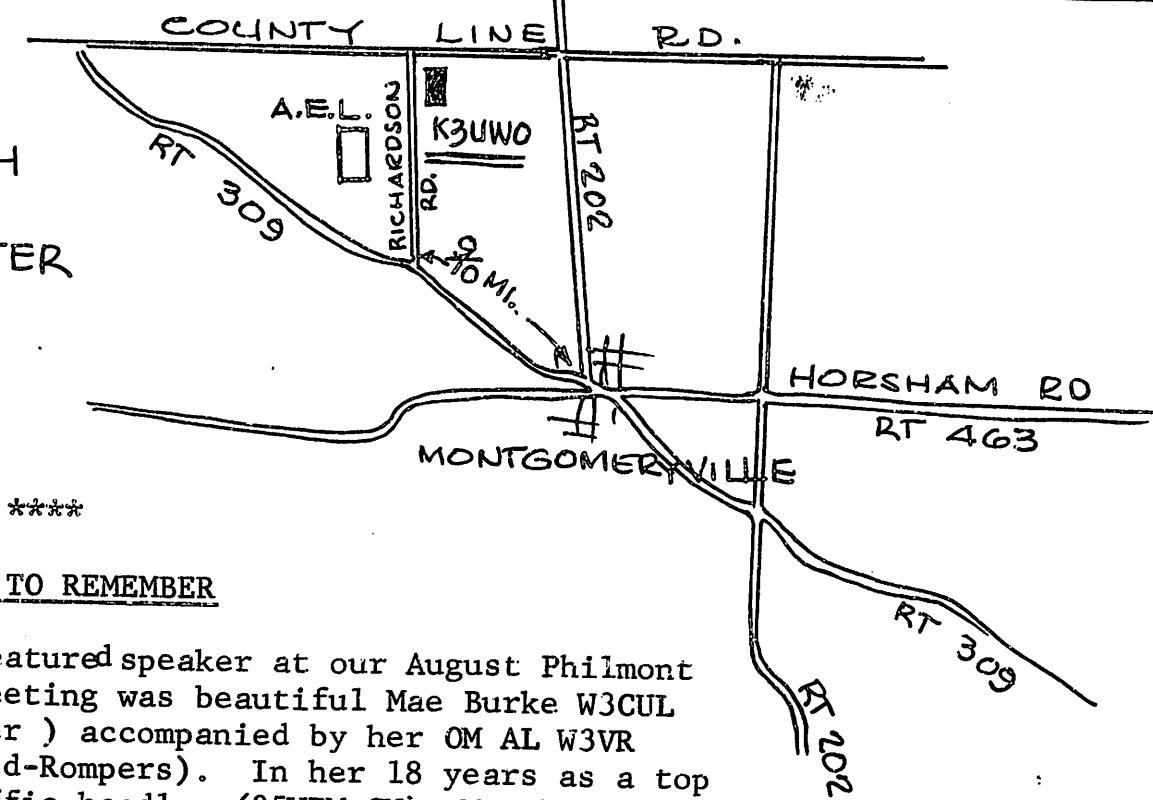
Blurb folding at W3QQH

The National Historical Meeting of the Antique Wireless Association will be held at the Franklin Institute on September 24 and 25, 1966. There will be talks on "The NAA Story, Spark Transmitters, Early Audio Development and more". There will be demonstrations of early detectors and old gear. Some of the OT's and Pioneers coming are Harry Houck, Paul Godley, Clarence Tuska and Tom Appleby. Join the fun! Luncheons and a Banquet cover the two-day affair. Participate in a part or all of it. It is your choice but don't miss it; it may be years before Philadelphia will be able to have it again. See W3CDY for tickets.

DIRECTIONS TO SEPTEMBER MID-MONTH, SEPTEMBER 21, 1966

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MIDMONTH  
AT  
BOB MINSTER  
K3UWO



A MEETING TO REMEMBER

The featured speaker at our August Philmont regular meeting was beautiful Mae Burke W3CUL ( C U Later ) accompanied by her OM AL W3VR (Ventilated-Rompers). In her 18 years as a top notch traffic handler (35WPM CW), Mae has won many citations and awards, the highest of which was the G. E. Gold Cup Edison Award presented to her in Washington, D.C. at the Mayflower Hotel. There were 51 nominees from 21 states for this award and Mae was declared the unanimous winner by the Judges. Mae told many interesting stories about her experiences in Amateur Radio such as the Phila. Electric Co. installing a 15KW special transformer just for her on the pole outside her shack so the neighbors lights don't blink when she and Al hit the brass each on their own, KWXMTER; another about a marooned community in a snowstorm cut off from the outside world except a Mobile Rig; through Mae's efforts a Helicopter landed with the necessary food and supplies. There were many telephone calls and all the telephone operators involved were anxiously awaiting news of the safe landing of the helicopter. The Bell Co. cancelled all phone charges for this endeavor. Their electric bills run between \$80.00 to \$120.00 per month. Mae handles "wholesale" CW Traffic from 7 A.M. to Noon; then SSB from 3 to 8 P.M. everyday. Who does the cooking and housework when Mae is doing all this? Why Al of course. Mae and Al are now both members of Navy Mars. Her call is NQFOG and Al's is NQFOR. At the present time, Mae says, most of the traffic coming and going to Viet Nam is handled by Navy Mars.

K3RTR

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MEETING NOTES

Thirty-four members and ten visitors were at the August regular meeting at the Institute. Visitors were: W3CUL, W3VR, K3TYB(father of K3CEE), W3AZE, W2WSP, Rick Spencer, Tom and Fred Bohlander, W. Shannon, J. Selfman. August midmonth at Dick Klein, W3WXC was well attended. Present were ADV, OWK, CEE, HIE, CDY, MHR, GOW, QQH, NIP, GNM, AWH, QZO, SPS, AHP, UWO, PHC, YHV. Many thanks to Dick and his lovely XYL for a wonderful evening.

NOTICE

Need or want an extra copy of the new Philmont Directory? They are available. See K3RTR. Only 25 cents a copy.

Recently a mobile ham in Rochester, N. Y., reported that some mobiles in his area were receiving "pink tickets" for not including their location at beginning and end of transmission. This was checked with Joe Welch, W3UQV who indicated he had other reports about such "pink tickets." The interpretation of the regulations is that mobile (and portable) stations must identify their location at the beginning and ending of transmissions. This identification must be reasonably comprehensive. "...operating mobile in Philadelphia" is not sufficient; it should be "Philadelphia, Pa." or "Philadelphia, Miss."

If a mobile is engaged in a series of transmissions as in a "round table," he may turn over to another without signing providing his transmission is less than 3 minutes. If over 3 minutes, he must identify his call and location at the end of transmission. If transmission is longer than 10 minutes, he must identify call and location every 10 minutes.

There is no local monitoring station in the Philadelphia area and we who operate on 2, 6, and 10 meters have generally fallen into the bad habit of omitting location in beginning and ending of transmissions. Now many Philmonters are operating mobile SSB on lower frequency bands and are subject to "pink tickets" if they forget to give location adequately. Apparently this is happening all over the country and the FCC is responding with "pink tickets."

Excerpt from 97.87 of FCC regulations governing transmission of call signs: When telephony is used, the call sign of the station shall be preceded by the words "this is" or the word "from" instead of the letters "de," followed by an announcement of the geographical location in which the portable or mobile station is being operated. Portable or mobile amateur radio telephone station operating in the third call area calls a fixed amateur station: W1ABC W1ABC W1ABC "this is" or the word "from" W2DEF W2DEF W2DEF operating portable (or mobile) 3 miles north of Bethesda, Md., over. W3JGB

## SWAP AND SHOP

FOR SALE: Model HW-10 Mark Heliwhip for 10 meters with cowl type mounting base and spring, also miniature S meter with 500 microamp movement. Harry Hoffman, W3VBY, 828 Hartman Avenue, Tempel, Pa. (215) 929-1951.

**FOR SALE:** Club owned Onan 3 kw 110 v 60 cy trailer mounted generator. Gasoline fuel, water cooling, fully metered.- Heath Apache transmitter TX-1 and Sideband generator SB-10. Full manuals, connecting cables, G-stand and D-104 mike. See W300H-884-8469

**FOR SALE:** Johnson Pacemaker exciter, 90 watts pep SSB, 90 watts CW and 35 watts AM plus American D4 dynamic microphone all for \$100.00. Bob Edwards, W3MOY, SK-7-4546.

K3GEB STEAM TRAIN MOBILE

Sam, K3GBA, took a rig aboard the steam train making the "Inaugural Run" from New Hope to Buckingham Valley. This is the beginning of a scenic and tourist trip that will make scheduled runs during the summer season. Sam had several contacts and reported no ignition noises.

When the yen for a piece of side band equipment gets so strong, you can almost taste it, then the mental processes are stimulated to a point which will not allow the old brain to say "Hold it, boy. Let's be sensible". Having arrived at this point in mind, you are somewhat out on a limb. Somewhat like "The spirit is willing but the flesh is weak". To be more specific, how do you come up with the bucks? For those who are bachelors, this problem can be a minor one. There are a number of steps that might be taken:

- 1 - Drop your sights from a Mercedes to a Mustang.
- 2 - Instead of buying 6 new suits this year, cut to 2. It's tough, but you'll live.
- 3 - Take sweetie-kins out only 3 nights a week. If she marries you, she'll be lucky if she gets out at all.
- 4 - As a last resort, go to work. This will put you in a position to say, "You've worked all your life for me, Mother. Now, go out and work for yourself".

For those who are well entrenched in matrimony, the cost aspect presents a sticky problem, to say the least. Might try:

- 1 - Telling the XYL the car payments are \$140.00 a month instead of \$100.00. She might buy it, but I doubt it.
- 2 - Put the brood to work, mowing lawns, delivering papers, etc., with the proceeds to you. Yuk, yuk!
- 3 - Try moonlighting, repairing TV's, toasters, and the like. Of course, there's a small problem of test equipment, inventory of parts, space and -- sleep! Then, you have to know something about all those wires and stuff. Forget it!
- 4 - Gather all your wonderful, old equipment together and trade it in on the new rig. So how are you going to come up with the other 95%?

Not left with much encouragement, are you? Well, there is only one suggestion I have left. If, with careful planning, the cultivation of a haggard look, and diligent attention to household chores and the family, you can get your honey-pot to say "You owe it to yourself, sweetie", you've got it made!

W3MHR

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PHILMONT SERVICE DEPARTMENT

Phil-Mont efforts produced another excellent result Aug. 13 & 14 when our mobiles and portable provided Communications for the Boy Scout Paddle-Rama exercise on the Delaware River from the Water Gap to Easton to Marshall's Island, a total distance of 49 miles. Sparked by W3NIP/3 (a canoe-mounted portable rig), mobiles W3YHV, K3CEE, K3UW0, W3BBB, W3VVS, and W3RQZ covered team relay points and slalom gates on the 2-day race. With W3NIP and rig in the bow, Phil Allen and outboard in the stern, the sweep canoe acted as roving policeman, first aid station, canoe patch and righting service, and aid to distressed girl-type swimmers on the 26 mile journey Saturday from Water Gap to Easton and 23 miles Easton to Marshall's Island on Sunday. Mobiles were stationed at each relay point and slalom gate to communicate timing information, quasi disasters, and penalty points to W3PYF/3 (W3CDY operating) in the Northampton County C.D. center and eventually to Scout officials at the Marshall's Island finish point.

3993 SSB and 29493 AM were used in various locations with varying results. The river was unpredictable radio-wise. At one point, YHV relayed thru northern N.Y. to PYF. In some instances, 75 could not make the hop satisfactorily direct and 10 did reasonably well. In others, 10 was completely unusable and 75 was solid. The canoe rig exceeded all expectations--at one time contacting PYF from 14 miles North of Easton. YHV with his camping trailer, CEE operating 10 and 75 simultaneously 'en mobile', Fred Bohlander eating continuously, NIP with his leaky air mattress and his encounter with the 19 year old would-be skinny dipper, Phil Allen and his sunburned thighs---all contributed to fun for all. Total mileage of all personnel concerned exceeded 1650 miles. W3RQZ, the Communications truck, served as sideboy to the canoe Saturday, control station at overnight stays, and control and P.A. system at the finish line during the awards ceremony. Weather was ideal Saturday and passable on Sunday. The rain held off until we were all packed and ready to depart. Thanks to W3CDY for his patient operating of PYF, to GBA and QV for their message handling back home, to Phil Allen and Chuck Snyder for their paddling efforts, and to all concerned for their contribution of radio skills, equipment, time and gasoline. The Boy Scout Council is especially grateful for our services. Participating were K3CEE, W3YHV, K3UWO, W3RQZ, W3VVS, W3CDY, W3AHP, W3BBB, Phil Allen, Fred Bohlander, and Rick Spencer.

On August 21, Phil-Mont participated in the fall AMA sponsored Model Aircraft Meet at Johnsville Naval Air Station. Our function, as usual, was to recover as many wayward models as possible. Partly cloudy weather and a fair Easterly wind coupled to make the day almost ideal for our work. However, most of the runaway models dropped into a heavily wooded area almost inaccessible to our mobiles. 24 models were recovered and returned to their owners via the flight line. It is rumored that one farmer, complete with shotgun, stymied many efforts at recovery. W3RQZ/3, complete with airconditioned control center, was the focal point with mobiles W3VVS, K3HIE, WA3DSP, W3BBB, W3DSG, W3MHR in action at various times. W3GIF and K3UWO served as control operators and coke drinkers. Four handy talkies on channel one were put to good use. The battery portable used so successfully at the canoe slalom was stationed at the free flight director's table for monitoring purposes. Contestants and officials were thus able to know of our presence and activity. Through a Heath Sixer from W3LEM, we were able to identify and deactivate an interfering 6 mtr carrier which was giving the 52 mc radio control operators some difficulty. As usual, our 29493 transmitter gave no difficulty to either the CB or 50 mc radio control activity. The club thanks one and all who so patiently remained through a day of what may have seemed fruitless effort. The Local AMA officials are happy indeed that we care to help.

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THE BELLS ARE RINGING

K3RTR and his XYL Anne celebrated their 47th wedding Anniversary last month. Only three more to go for the Golden One. Philmont congratulates this happy and lucky pair.

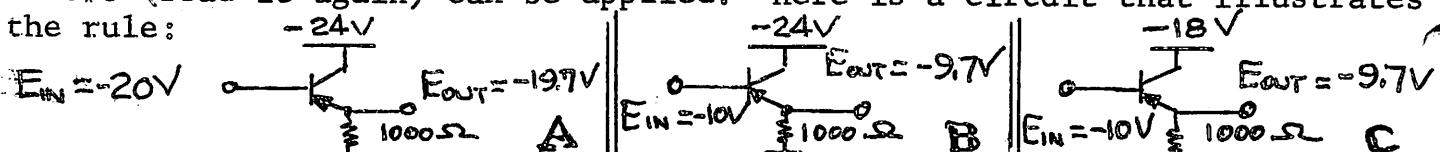
## Transistors for Hams-Part III- By Bob Thomas, W3QZO

Before embarking on a design example of a typical ham transistor circuit, one additional guideline must be added to the two already described. The new concept is that for most amateur applications of transistors, the emitter voltage is always within a few tenths of a volt of the base voltage. The exception to this condition is where nonlinearity occurs intentionally, as in switching circuits and multivibrators, or unintentionally, as in an overloaded amplifier that is distorting. In germanium transistors the base-emitter voltage is normally about 0.3 volt; in silicon types, it is about 0.6 volt. In PNP transistors the base is Negative with respect to the emitter and in NPN devices it is Positive; this was illustrated in the diagrams last month. Adding this new thought, which is a sweeping but nevertheless useful generalization, to what has been previously explained, we are now equipped with the following rules that may be applied to the design of experimental circuits:

1. In semiconductor symbols, current flow is only in the direction of the arrow.

2. D. C. current gain ( $\beta_{DC}$ ) is equal to collector current divided by base current.

3. The emitter voltage is always almost the same as the base voltage. It becomes apparent early in the game of transistor experimentation that some form of variable d-c power supply is desirable. That's where rule #3 (read it again) can be applied. Here is a circuit that illustrates the rule:



First, observe in all these diagrams that the emitter is always within 0.3V of the base potential. Whatever voltage we put on the base, the emitter will follow. As a matter of fact, this circuit is called an emitter follower simply because the emitter voltage follows the base. Of course, the voltage applied to the base must be in the range limited by ground and the collector supply voltage-anywhere from ground to -24 volts in diagrams A and B, or ground and -18 volts in diagram C. Base voltages outside these limits would simply result in nonlinear operation; you could put +6V on the base, but the emitter cannot follow past ground potential (0 volts). Now compare diagrams B and C. Notice that although the collector voltage changes, the output (emitter) still follows the input (base). And, although not shown in the diagrams, the emitter voltage in all three examples would remain nearly the same as shown regardless of the value of the emitter resistor. That is, if the 1000 ohm resistor were decreased to 100 ohms in diagram B, the emitter voltage ( $E_{out}$ ) would still be -9.7 volts. The emitter follower circuit thus has two properties that make it attractive for use in power supplies:

1. Output voltage is independent of supply (collector) voltage; it depends only on input (base) voltage.

2. Output voltage is independent of load (emitter) resistance; it depends only on input (base) voltage. This is the same as saying the output impedance is very low.

You can add an emitter follower to any existing low voltage power supply. When this is done, the transistor is often called a "series regulator" because it is in series with the load resistance, and the output is regulated only by the d-c signal on the base. Finally, because of the current gain of the transistor ( $\beta$ ) the current in the base is a small fraction of the load current and we can use a small potentiometer to set the base at whatever voltage we want and the emitter will follow even though the supply voltage fluctuates due to power line variations and, to a limited extent, even though the output loading varies. Although it was originally planned to cover a specific application this month, the length of this preliminary explanation and space limitations will delay our sample circuits until next month. In the meantime, hook up a transistor as shown in the basic circuit here and see if what has been said so far is true. QRX.

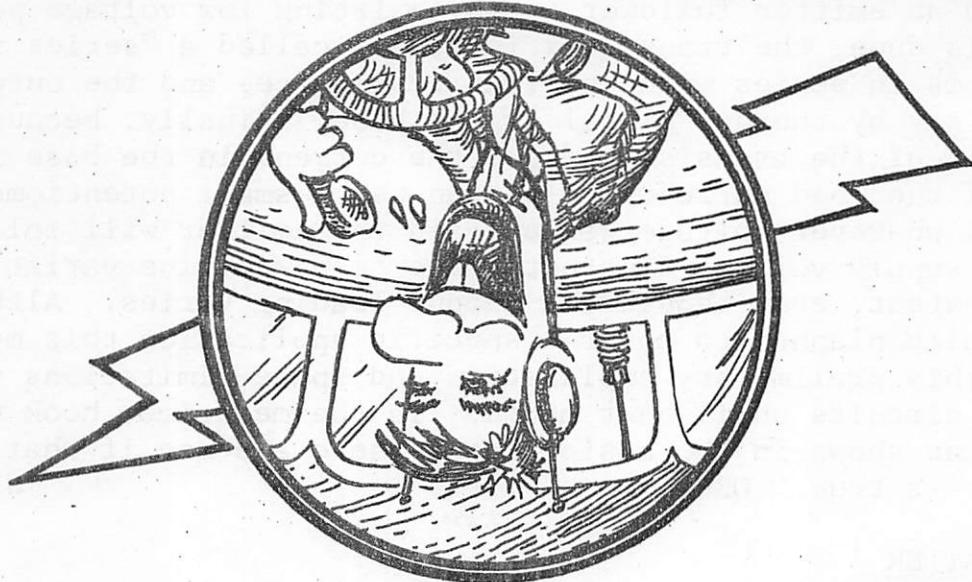
W3QZ0

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CHANNEL CHATTER

Interesting program for the September regular meeting involving a talk and demonstration by Bell Tel. Co. entitled "Adventures in Sound" from the caveman's grunt to modern stereo...QZO new printer of Blurb as of October issue...Blurb folding now at QQH's...SPS working for Dyna Sciences in Blue Bell, doing research on a two month job for NASA...Club QSL's are now available. See OWK...Those desiring to operate an amateur station in Canada must no longer send to Ottawa since the issuance of amateur operating permits has been decentralized and you must now send for an application blank to the proper Department of Transport according to the port of entry, i.e., the Province involved. See W3JKH for details...the midmonth at WXC's was so crowded that CEE ended up sitting in a baby's high chair...YHV now operating a full gallon mobile with the Heath SSB linear amplifier installed-because of space limitations in the Mustang, he had to bolt the power supply to the underside of the hood-another Philmont first?...Reading ARC clambake a big success...good turnout from Philmont including ADV, OWK and ZLR, CDY, JKH and XYL, associate member Roy K4CLZ, DJW and XYL, CRW and OM, AES, SPS. Free beer and soda all day long, prizes won by almost everyone, great food and games...XYL of W3JKH just received her amateur radio license and is now WA3GGC. She's now holding down the six meter FM base station for Gerry. Congratulations, Dolores...A photographer from the scout magazine "Boy's Life" was at the Paddle-rama. Perhaps some photos of Philmont's participation may soon appear in that magazine...JGB ran out of gas one morning recently on West River Drive...YHV heard his call and came to the rescue. He radioed for gas and Bob was soon on his way. As QV predicted, the canoe race was run 100 times over at midmonth! Pity K3UWO stranded on an island when the paddle-rama ended. Our stalwart canoe men had to brave the peril of a bikini-clad Lorelei (who gave S&H Green Stamps) on their perilous trip down the river. The F.T.C. is going to NIP this in the bud. 75 meters taking over each morning-0700 Gang: JGB, HFY, GNM, IW, WNC, YHV, CHZ-starting to sound like old times. Philmont is going mobile again...QZO is rebuilding the RF amplifier of his net receiver-temporarily back to 75A3. Now that Lloyd is fully rested after a long vacation things should start humming around W3TKQ. All ash trays in the shack must now be emptied and cleaned; the woodwork polished; no more fingerprints on the MIKE... or so says RTR. DYP back after a successful eye operation.

PHIL-MONT MOBILE RADIO CLUB INC.



## The "Blurb"

A PHIL-MONT MOBILE RADIO  
CLUB PUBLICATION  
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